



Form PTO-1449 Substitute	U.S. Department of Commerce Patent and Trademark Office	Application Number	10/551,162
		Filing Date	March 29, 2004
		First Named Inventor	Stan Gronthos et al.
		Art Unit	1644
		Examiner Name	Michail A. Belyavskyi
		Attorney Docket No.	75190/JPW/BJA

INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	1	5,197,985	03-30-1993	Caplan et al.
	2	5,226,914	07-13-1993	Caplan et al.
	3	5,486,359	01-23-1996	Caplan et al.
	4	5,591,625	01-07-1997	Gerson et al.
	5	5,811,094	09-22-1998	Caplan et al.
	6	5,827,740	10-27-1998	Pittenger
	7	5,837,539	11-17-1998	Caplan et al.
	8	5,922,597	07-13-1999	Verfaillie et al.
	9	5,980,887	11-09-1999	Isner et al.
	10	6,022,540	02-08-2000	Bruder et al.
	11	6,087,113	07-11-2000	Caplan et al.
	12	6,261,549	07-17-2001	Fernandez et al.
	13	6,322,784	11-27-2001	Pittenger et al.
	14	6,335,195	01-01-2002	Rodgers et al.
	15	6,387,367	05-14-2002	Davis-Sproul et al.
	16	6,387,369	05-14-2002	Pittenger et al.
	17	6,645,727	11-11-2003	Thomas et al.
	18	6,709,864	03-23-2004	Pittenger et al.
	19	6,875,430	04-05-2005	McIntosh et al.
	20	7,122,178	10-17-2006	Simmons et al.
	21	5,405,722	01-11-1995	Ponting et al.
	22	2004-0107453	06-03-2004	
	23	2006-0008452	01-12-2006	
	24	2005-0019911	01-27-2005	
	25	2005-0158289	07-21-2005	
	26	2005-0281790	12-22-2005	
	27	2002-0085996	07-2002	
	28	2006-0286077 A1	12-21-2006	

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Applicants: Stan Gronthos et al.

Serial No.: 10/551,162

File Date: May 29, 2004

Exhibit A

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	34	Hellström M, Kalén M, Lindahl P, Abramsson A, and Betsholtz C. (1999) Role of PDGF-B and PDGFR- β in recruitment of vascular smooth muscle cells and pericytes during embryonic blood vessel formation in the mouse. Development 126: 3047-3055	
	35	International Search Report issued by the International Searching Authority (ISA/AU) on May 17, 2004 in connection with International Application No. PCT/AU2004/000417	
	36	International Preliminary Report on Patentability issued by the International Bureau of WIPO on October 1, 2005 in connection with International Application No. PCT/AU2004/000417	
	37	Alberico et al. (1987) Blood 69, page 1120-1127	
	38	Allen, T.D., (1981) "Haemopoietic Microenvironments in vitro:ultrastructural aspects" CIBA Found. Symposium 84, pages 38-67	
	39	Allen et al. (1990) "Marrow Biology and Stem Cells" Immunol. Ser. 49, pages 1-38	
	40	Anklesaria et al. (1989) Blood 74, page 1144-1151	
	41	Anklesaria et al. (1987) Proc. Nat'l Acad. Sci. USA 84, page 7681-7685	
	42	Bennett, J.H. et al. (1991) J. Cell Sci. 99, page 131-139	
	43	Bentley, S.A. (1982) Br. J. Haematol 50(1), pages 1-6	

EXAMINER SIGNATURE	DATE CONSIDERED
--------------------	-----------------

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	44	Castro-Malaspina et al. (1980) "Characterization of Human Bone Marrow Fibroblast Colony-Forming Cells and Their Progeny" Blood 56, pages 289-301	
	45	Castro-Malaspina et al. (1981) "Human Megakaryocyte Stimulation of Proliferation of Bone Marrow Fibroblasts" Blood 57, pages 781-787	
	46	Clarke, Emer, "Mesenchymal Cells" www.stemcell.com (mini-review)	
	47	Dexter et al. (1977) "Conditions Controlling the Proliferation of Haemopoietic Stem Cells in Vitro" J. Cell Physiol. 91, pages 335-344	
	48	Dexter et al. (1984) Kroc Found. Ser. 18, pages 57-96	
	49	Doherty, M.J. et al. (1998) "Vascular Pericytes Express Osteogenic Potential In Vitro and In Vitro" J. Bone and Mineral Research 13, pages 828-838	
	50	Fong et al. (1997) "Nonradioactive, Agarose Minigel Procedure for Telomeric Repeat Amplification Protocol" BioTechniques 23, pages 1029-1032	
	51	Friedenstein (1976) Int'l R. Cytology 47, page 327	
	52	Friedenstein (1980) "Stromal Mechanisms of Bone Marrow: Cloning in Vitro and Retransplantation in Vivo" Immunology of Bone Marrow Transplantation, pages 19-29 Haematol. Blood Transfusion	
	53	Friedenstein et al. (1970) "The Development of Fibroblast Colonies in Monolayer Cultures of Guinea-Pig Bone Marrow and Spleen Cells" Cell Tissue Kinetics 3, pages 393-403	

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--------------------	-----------------

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	54	Friedenstein et al. (1992) Bone and Mineral 18, pages 199-213	
	55	Gronthos, S., et al. (1994) "The STRO-1+ Fraction of Adult Human Bone Marrow Contains the Osteogenic Precursors," Blood 84, pages 4164-4173	
	56	Gronthos, S., et al. (1995) Blood 85, pages 929-940	
	57	Huang and Terstappen (1992) Nature 360, pages 745-749	
	58	Keating et al. (1982) Nature 298, pages 280-283	
	59	Kim et al. (1994) Science 266, pages 2011-2015	
	60	Knospe et al. (1966) Blood 28, pages 398-415	
	61	Knospe et al. (1972) Blood 39, pages 331-340	
	62	Lichtman (1981) Experimental Hematology 9, pages 391-410	
	63	Long (1992) Experimental Hematology 20, pages 288-301	
	64	McManus and Weiss (1984) Blood 64, pages 1036-1041	
	65	McIntyre and Bjornson (1986) Exp. Hematol. 14, pages 833-839	
	66	Miltenyi et al. (1990) Cytometry 11, pages 231-238	
	67	Owen (1985) Bone and Mineral Research 3, pages 1-25	

EXAMINER
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	68	Owen and Friedenstein (1988) CIBA Found. Symposium 136, pages 42-60	
	69	Perkins and Fleischman (1990) Blood 75, pages 620-625	
	70	Piersma et al. (1983) Br. J. Haematol. 54, pages 285-290	
	71	Rothstein et al. (1985) Blood 65, page 744	
	72	Simmons and Gronthos (1991) Int'l J. Cell Cloning 9, page 408 (abstract)	
	73	Simmons, P.J., et al. (1994) "Isolation, Characterization and Functional Activity of Human Marrow Stromal Progenitors in Hemopoiesis" Advances in Bone Marrow Purging and Processing: Progress in Clinical and Biological Research; Fourth Int'l Symposium 389, pages 271-280	
	74	Simmons et al. (1987) Nature 328, pages 429-432	
	75	Simmons and Torok-Storb (1991) Blood 78, pages 55-62	
	76	Simmons and Torok-Storb (1991) Blood 78, pages 2848-2853	
	77	Tavassoli and Friedenstein (1983) Ann. J. Hematol. 15, pages 195-203	
	78	Tavassoli and Crosby (1968) Science 161, pages 54-56	
	79	Testa et al. (1988) "Long-Term Bone Marrow Damage After Cytotoxic Treatment: Stem Cells and Microenvironment in Hematopoiesis: Long-Term Effects of Chemotherapy and Radiation" Hematol. Published by Marcel & Decker, Inc. 8, pages 75-91	

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	80	Van Vlasselaer et al. (1994) Blood 84, page 753-763	
	81	Waller et al. (1995) Blood 85, page 2422-2435	
	82	Weiss (1976) Anatomical Record 186, page 161-184	
	83	Zółtowska A, Stepiński J, Lewko B, Zamorska B, Roszkiewicz A, Serkies K, and Kruszewski WJ. (2001) Malformations of Angiogenesis in the Low Differentiated Human Carcinomas. Immunohistochemical Study. Arch. Immunol. Ther. Ex. 49: 59-61	
	84	Axelrad et al., New Technologies for the Enhancement of Skeletal Repair, Injury, Int. J. Care Injured (2007) 38S1:S49-S62	
	85	Bruder et al., Mesenchymal Stem Cells in Bone Development, Bone Repair, and Skeletal Regeneration Therapy, J. Cell Biochem; (1994) 56:283-294	
	86	Dennis et al., Osteogenesis in Marrow-Derived Mesenchymal Cell Porous Ceramic Composites Transplanted Subcutaneously: Effect of Fibronectin and Laminin on Cell Retention and Rate of Osteogenic Expression, Cell Transplant (1992) 1:23-32, Abstract	
	87	Zvaifler, et al., (2000) "Mesenchymal precursor cells in the blood of normal individuals," Arthritis Research and Therapy, 2: 477-488	
	88	Ji, et al., (2004) "Interactions of Chemokines and Chemokine Receptors Mediate the Migration of Mesenchymal Stem Cells to the Impaired Site in the Brain After Hypoglossal Nerve Injury," Stem Cells, 22: 415-427	
	89	Sordi, et al., (2005) "Bone marrow mesenchymal stem cells express a restricted set of functionally active chemokine receptors capable of promoting migration to pancreatic islets," Blood, 106(2): 419-427	

EXAMINER
SIGNATURE

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	90	Wynn, et al., (2004) "A small proportion of mesenchymal stem cells strongly expresses functionally active CXCR4 receptor capable of promoting migration to bone marrow," Blood, 104(9): 2643-2645	
	91	Kortesidis, et al., (2005) "Stromal-derived factor-1 promotes the growth, survival, and development of human bone marrow stromal stem cells," Blood, 105(10): 3793-3801	
	92	Gronthos, S., et al., (1999) "Differential Cell Surface Expression Of The STRO-1 And Alkaline Phosphatase Antigens On Discrete Developmental Stages In Primary Culture Of Human Bone Cells," Journal of Bone and Mineral Research, 14(1): 47-56	
	93	Stewart, K., et al., (1999) "Further Characterization Of Cells Expressing STRO-1 In Cultures Of Adult Human Bone Marrow Stromal Cells," Journal of Bone and Mineral Research, 14(8): 1345-1356	
	94	International Search Report issued by the International Searching Authority (ISA/AU) on August 22, 2005 in connection with International Application No. PCT/AU2005/000953	
	95	International Search Report issued by the International Searching Authority (ISA/AU) on November 25, 2005 in connection with International Application No. PCT/AU2005/001445	
	96	Office Action issued January 12, 2005 in connection with U.S. Serial No. 10/030,411	
	97	Office Action issued June 28, 2005 in connection with U.S. Serial No. 10/030,411	
	98	Final Office Action issued January 9, 2006 in connection with U.S. Serial No. 10/030,411	

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	99	Office Action issued April 20, 2007 in connection with U.S. Serial No. 10/955,709	
	100	Office Action issued August 24, 2007 in connection with 11/178,920	
	101	Office Action issued August 25, 2006 in connection with 110/955,709	
	102	Examiner Interview Summary issued June 27, 2006 in connection with U.S. Serial No. 10/030,411	
	103	Office Action issued August 24, 2007 in connection with U.S. Serial No. 11/178,920	
	104	Office Action issued December 15, 2006 in connection with U.S. Serial No. 11/178,920	
	105	Office Action issued July 10, 2006 in connection with U.S. Serial No. 11/178,920	
	106	Office Action issued January 22, 2007 in connection with U.S. Serial No. 11/168,875	
	107	Office Action issued July 10, 2006 in connection with U.S. Serial No. 10/813,747	
	108	Office Action issued December 15, 2006 in connection with U.S. Serial No. 10/813,747	
	109	Office Action issued April 3, 2007 in connection with U.S. Serial No. 10/813,747	
	110	Office Action issued October 19, 2007 in connection with U.S. Serial No. 10/813,747	
	111	Restriction Requirement issued January 8, 2008 in connection with U.S. Serial No. 11/326,736	

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	112	Final Office Action issued January 10, 2008 in connection with U.S. Serial No. 10/955,709	
	113	Extended European Search Report issued December 27, 2007 in connection with European Application No. 05787106.3	
	114	Supplementary European Search Report issued January 2, 2008 in connection with European Application No. 05754008.0	
	115	Cochlovius, B. et al. (2003) "Therapeutic Antibodies," Modern Drug Discovery pp 33-34, 37-38	
	116	Gronthos et al. Journal of Hematotherapy, 1996. 5, 15-23 (Abstract)	
	117	Hansson, M. et al. (2007) "Commentary: Isolated Stem Cells - Patentable as Cultural Artifacts?" V.25, pp. 1507-1510	
	118	Pan, Beiqing et al. (2004) "The nitrogen-containing bisphosphonate, zaledronic acid, increases mineralisation of human bone-derived cells in vitro." Bone 34:112-123	
	119	Cassiede, P. et al. (1996) "Osteochondrogenic Potential of Marrow Mesenchymal Progenitor Cells Exposed to TGF- β 1 or PDGF-BB as Assayed In Vivo and In Vitro" Journal of Bone and Mineral Research Vol. 11(9):1264-1273	
	120	Kang Yong Jung et al. (2004) "Involvement of PI-3-kinase, JNK, PKC, and PKA in the PDGF-induced proliferation in human adipose tissue-derived mesenchymal stem cells" Vol. 18(8) Pg. C253	

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